

## CHONGQING ZONGSHEN GENERAL POWER MACHINE CO., LTD.

EXECUTIVE ORDER U-U-082-0274 New Off-Road Small Spark-Ignition Engines at or Below 19 Kilowatts

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following engine and emission control systems produced by the manufacturer are certified for use in small off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGI	NE FAMILY	DISPLACEMENT (cc)	ENGINE CLASS		FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)		
2018	JCZH	IS.1591V1	159, 141	4-stroke, >80 c	cc - <225 cc	Gasoline		
DURABI HOUF			SPECIAL FEATURES		TYPICAL EQUIPMENT APPLICATION			
125		EM .			Walk-Behind Lawnmower, Compressor, Pump, Pressure Washer, Stump Beater, Non-Backpack Blower, Tiller, Edger, Other Industrial Equipment			
ENGII CODES/Mo (rated po kilowatt	ODELS wer in	See Attachment						
EGR=exhaus	t gas recirc	ulation AIR=seco	ondary air injection PAIR≕	puised AIR MFI=mul	Iti port fuel injec	varm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S tion SFI=sequential MFI TBI=throttle body fuel injection x)=in series ECM=engine control module		

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx), carbon monoxide (CO), and particulate matter (PM) emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2403(b)), and certification emission levels for this engine family in grams per kilowatt-hour (g/kW-hr). Engines within this engine family shall have closed crankcases in conformance with Section 1054.115(a) of the "California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines," adopted October 25, 2012.

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)
STANDARD	10.0	549	*
FAMILY EMISSION LEVEL	*	*	*
CERTIFICATION LEVEL	8.3	363	*

BE IT FURTHER RESOLVED: That the family emission level(s) (FELs), as applicable, is an emission limit declared by the manufacturer for use in the averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2403(e)(1) and 2407(a).

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2404 (emission control labels) and 13 CCR Sections 2405 and 2406 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

day of December 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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Model Year: Manufacturer:

Engine Family:

JCZHS.1591V1

2018 Attachment, 1 of 2 Chongqing Zongshen General Power

Issued: Revised:

1/31/2018

E.O. Number: N-N-082-0274

**Small Off-Road Engine Model Summary Form** 

RC2:7-3-18

Units	for	Tab	le:	kw
OTHES	101	1 40		1/44

Worst Case?	47. Model Designation	48. Sales Code	49. Displ (cc)	50. Bore/ Stroke	51. Ignition Timing	52. Max Power	53. Rated Speed (RPM)	54. Rated Torque	55. Torque Speed (RPM)	56. Emiss Control Sys
X	5X65RU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5T65RU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	5T65RW_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1T65RU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1T65NU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM .
	1T65VU	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1T65TU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	5T65VU_	50-State	141	65/43	20	2.2	3600	6.5	3000	EM
	1X65RU_	50-State	159	65/48	20	2.6	3600 ·	7.0	3000	EM
	5X65RU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5X65RW_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	6X65RW_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65VU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5X65VU	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65CU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65TU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65LU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	1X65MU_	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	5X65MU	50-State	159	65/48	20	2.6	3600	7.0	3000	EM
	6X65MU	50-State	159	65/48	20	2.6	3600	7.0	3000	EM

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Model Year:

2018 Attachment, Z of Z Chongqing Zongshen General Power

Issued: Revised:

5/21/2018

Manufacturer: Engine Family:

JCZHS.1591V1

E.O. Number: u-u-08z-0274PC2:7-3-18

## Small Off-Road Engine Model Summary Form

Units for Table:

Worst Case?	47. Model Designation	48. Sales Code	49. Displ (cc)	50. Bore/ Stroke	51. Ignition Timing	52. Max Power	53. Rated Speed (RPM)	54. Rated Torque	55. Torque Speed (RPM)	56. Emiss Control Sys
Case?	Designation 5X65QU_ 6X65QU_ 1T65RW_ AX65MU_ BX65MU_ 1X65HU_ 8X65MU_	Code 50-State 50-State 50-State 50-State 50-State 50-State 50-State	(cc) 159 159 141 159 159 159	Stroke 65/48 65/48 65/48 65/48 65/48	Timing 20 20 20 20 20 20 20 20	2.6 2.6 2.2 2.6 2.6 2.6 2.6	(RPM) 3600 3600 3600 3600 3600 3600	7.0 7.0 6.5 7.0 7.0 7.0 7.0	(RPM) 3000 3000 3000 3000 3000 3000 3000	EM EM EM EM EM EM EM EM EM